DaimlerChrysler AG

Patent claims

- 5 1. A device (10) for the internal high pressure forming of a hollow profile (5),
 - comprising a forming tool,
 - comprising a sealing arrangement (11) for holding and sealing an end (12) of the hollow profile (5), this
- end (12) projecting from the impression (16) of the forming tool,
 - the sealing arrangement (11) having a section (6), plunging into the hollow profile (5), of an axial punch (4) and at least one clamping jaw (3) which,
- when the section (6) of the axial punch (4) has plunged in, presses radially from outside on the hollow profile end (12) in such a way that the clamping jaw (13) fixes the latter in position,
- and provided with an actuator (14) which drives the clamping jaw (3) for displacing it only radially to the hollow profile axis,
 - characterized in that at least one V-ring (2) is arranged on a side of the clamping jaw (3) facing the hollow profile end (12).

2. The device as claimed in claim 1, characterized in that the actuator (14) is formed by at least one

that the actuator (14) is formed by at least one hydraulic cylinder or comprises at least one hydraulic

cylinder.

- 3. The device as claimed in claim 1 or 2, characterized in that the actuator (14) is formed by at least one electric motor.
- 35 4. The device as claimed in one of claims 1 to 3, characterized in that the forming tool is formed from at least two die parts (15, 15', 15'') displaceable relative to one another.

10

- 5. The device as claimed in one of claims 1 to 4, characterized in that the clamping jaw (3) is mounted on the forming tool in such a way as to be radially displaceable relative to the hollow profile axis.
- 6. The device as claimed in one of claims 1 to 5, characterized in that the actuator (14) enables the clamping jaw (3) to be displaced when the forming tool is open.
- 7. The device as claimed in one of claims 1 to 6, characterized in that the forming tool is designed in such a way that the die parts (15, 15', 15'') can be displaced while the clamping jaw (3) fixes the hollow profile end (12).
- 8. The device as claimed in one of claims 1 to 7, characterized in that the clamping jaw (3) is supported on the forming tool, whereas the forming tool is supported on a foundation (9).
- 9. The device as claimed in one of claims 1 to 7, characterized in that the clamping jaw (3) and the forming tool are each supported on a foundation (9).
 - 10. The device as claimed in one of claims 1 to 9, characterized in that the clamping jaws (3) can be carried along axially.